

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~Coupling~~ A coupling system between high-voltage electrical equipment ~~composed of including~~ a connector ~~or union assembly~~ that inserts in female connectors of the high voltage equipment ~~which comprises~~ the connector comprising:

an insulating shell inside which are housed conducting elements, whose external surface is partially covered by a ~~conducting or semi-conducting~~ conductive layer ~~wherein that it incorporates and~~

a mechanical protection device ~~independent of the union assembly and the connectors connected to the connector~~ and disposed surrounding the ~~semi-conducting~~ conductive layer and in contact with said ~~semi-conducting~~ conductive layer.

2. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 1, wherein that the protection device consists of a conducting ring connected to earth.

3. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 2, wherein that the conducting ring connected to earth is metallic.

4. (Currently Amended) ~~Coupling~~ The coupling between high-voltage electrical equipment according to claim 1, wherein ~~that~~ the protection device ~~incorporates~~ includes an inductive current sensor.

5. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 4, wherein that the current sensor consists of a Rogowski coil.

6. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 4, wherein that the current sensor consists of a winding about a magnetic core.

7. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to the claim 1, wherein ~~in that~~ the protection device ~~incorporates~~ includes a capacitive voltage sensor.

8. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 1, further comprising a second connector and

wherein ~~that~~ the protection device encompasses all the connectors of the ~~phases of the~~ coupling system between high-voltage equipment.

9. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 8, wherein ~~that~~ the protection device consists of a conducting ring connected to earth.

10. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 9, wherein ~~that~~ the conducting ring connected to earth is metallic.

11. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 8, ~~wherein that it comprises~~ further comprising a current sensor that externally encompasses all phases of the coupling system.

12. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claim 11, ~~wherein that it comprises~~ further comprising a current sensor for each phase.

13. (Currently Amended) ~~Coupling~~ The coupling system between high-voltage electrical equipment according to claims 8 ~~wherein that it incorporates~~ including voltage detection for each phase of ~~the~~ a main circuit.